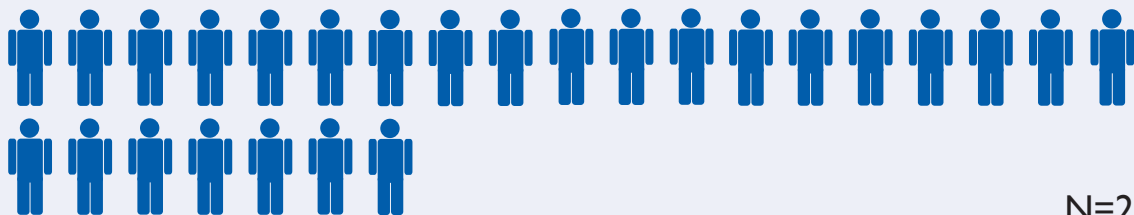


ESTIMATED NUMBER OF NEW HIV INFECTIONS PER 100 PERSON-YEARS AMONG HETEROSEXUAL SERODISCORDANT COUPLES BY SERUM VIRAL LOAD OF HIV PARTNER¹



N=26*

50,000 or more copies/ml



N=15*

10,000–49,999 copies/ml



N=13*

3,500–9,999 copies/ml



N=2*

<3,500 copies/ml

Low viral load is not a guarantee against the transmission of HIV.

This shows the number of new HIV infections that might occur in one year if 100 heterosexual people with different viral loads of HIV had unprotected sex with partners who do not have the virus. When the viral load is high, risk for HIV transmission is the greatest. **But even when the serum viral load is undetectable, HIV can still exist in semen, vaginal and rectal fluids, breast milk, and throat tissue.**^{1,2}



ANSWERS TO QUESTIONS YOUR PATIENTS MIGHT ASK³⁻⁶

Q: How does HIV cause AIDS?

A: HIV destroys certain kinds of blood cells (called CD4 cells) that are important to your immune system, which is what protects your body from disease. Without these cells, you become susceptible to many infections and some cancers.

Q: How is HIV spread?

A: The most common way that HIV is spread is sexual activity (anal, vaginal, or oral) with a person living with HIV. Sharing needles or works with a person living with HIV can also spread the disease. HIV can also be spread through transfusion of infected blood or blood products, though that risk is very low in the United States. Mothers with HIV can spread it to their babies before or during birth. HIV can also be spread through breast milk. Mothers with HIV should not breastfeed their babies.

Q: Can I pass HIV to someone else by doing things like shaking hands?

A: No. HIV is not spread through everyday contact at school, work, or in social settings. HIV cannot be caught from things like a handshake, a doorknob, a pet, or food. The virus does not live long outside the body.

Q: If I am living with HIV and pregnant, will my baby have HIV too?

A: Not necessarily. If you are treated with HIV drugs early in the pregnancy, the risk of passing the virus to your baby can be 2% or less. Even if you don't receive the HIV drugs until you are in labor, the chances of transmission are much lower than if you aren't treated at all. It's also important to remember that HIV can be spread through breast milk. Mothers with HIV should not breastfeed their babies.

Q: Is there a connection between HIV and other sexually transmitted diseases (STDs)?

A: Yes. If you become infected with another STD (such as syphilis, gonorrhea, or herpes), you are three to five times more likely to pass HIV to someone else than if you don't have another STD.

References:

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2. Centers for Disease Control and Prevention. Incorporating HIV Prevention into the Medical Care of Persons Living with HIV: Recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. *MMWR* 2003;52(RR-12):1–24.
3. Centers for Disease Control and Prevention. HIV/AIDS Questions and Answers. Available at: www.cdc.gov/hiv/pubs/faqs.htm. Accessed March 1, 2005.
4. Centers for Disease Control and Prevention. HIV testing among pregnant women—United States and Canada, 1998–2001. *MMWR* 2002;51(45):1013–1016.
5. Dorenbaum A, Cunningham CK, Gelber RD, et al. Two-dose intrapartum/newborn nevirapine and standard antiretroviral therapy to reduce perinatal HIV transmission: a randomized trial. *Journal of the American Medical Association* 2002;288:189–198.
6. Centers for Disease Control and Prevention. Is there a connection between HIV and other sexually transmitted diseases? Available at www.cdc.gov/hiv/pubs/faq/faq24.htm. Accessed March 9, 2005.

End Note:

*Calculated using transmission rate of 2.2 per 100 person-years among HIV-positive partners with viral load of <3,500 copies/ml as the referent, and adjusted rate ratios of 5.80, 6.91, and 11.87 among HIV-positive partners with viral loads of 3,500-9,999, 10,000-49,999, and >50,000 copies/ml respectively.